

# Comparisons of Job Characteristics

**Focus Occupation:** [Mechanical Engineering Technicians \(17-3027\)](#)

**Associated Occupation:** [Mechanical Drafters \(17-3013\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

## Knowledge

Similarity of Focus Occupation to Associated Occupation: 89

**Focus Occupation:** Mechanical Engineering Technicians (17-3027)

**Associated Occupation:** Mechanical Drafters (17-3013)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Design	5.2	22.0	15.1	<< Extensive education and/or training may be required
Engineering and Technology	5.7	17.6	16.1	0 Current knowledge level may be sufficient
Mathematics	9.2	13.0	13.1	0 Current knowledge level may be sufficient
Mechanical	6.8	12.4	18.0	>> Current knowledge level is likely more than sufficient
Physics	4.3	8.3	10.2	> Current knowledge level is likely sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Skills

Similarity of Focus Occupation to Associated Occupation: 59

**Focus Occupation:** Mechanical Engineering Technicians (17-3027)

**Associated Occupation:** Mechanical Drafters (17-3013)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Mathematics	6.2	10.6	8.4	< A higher skill level may be required
Operations Analysis	5.0	8.6	6.8	< A higher skill level may be required
Technology Design	2.6	6.0	3.9	<< Extensive development of skills in this area may be required
Programming	2.2	5.8	2.1	<< Extensive development of skills in this area may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Abilities

Similarity of Focus Occupation to Associated Occupation: 85

Focus Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation: Mechanical Drafters (17-3013)

Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating		Evaluation of Focus Occupation
Near Vision	11.1	12.7	11.8	0	Current ability level may be sufficient
Visualization	7.5	11.7	10.2	<	Some improvement in abilities may be required
Mathematical Reasoning	6.3	11.1	9.0	<	Some improvement in abilities may be required
Flexibility of Closure	7.8	9.9	9.2	0	Current ability level may be sufficient
Finger Dexterity	7.6	9.7	9.6	0	Current ability level may be sufficient
Originality	7.6	9.6	8.6	<	Some improvement in abilities may be required
Fluency of Ideas	7.6	9.4	9.0	0	Current ability level may be sufficient
Number Facility	6.3	9.3	9.7	0	Current ability level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Activities that Both Occupations Have in Common

Similarity of Focus Occupation to Associated Occupation: 90

Focus Occupation: Mechanical Engineering Technicians (17-3027)

Associated Occupation: Mechanical Drafters (17-3013)

Work Activities	Exclusivity of Activity
Analyze technical data, designs, or preliminary specifications	47
Communicate technical information	4
Confer with engineering, technical or manufacturing personnel	25
Draw prototypes, plans, or maps to scale	57
Evaluate engineering data	60
Examine engineering documents for completeness or accuracy	62
Follow manufacturing methods or techniques	73
Prepare technical reports or related documentation	22
Read blueprints	10
Read schematics	34
Read technical drawings	7
Understand engineering data or reports	48
Understand technical operating, service or repair manuals	6
Use drafting or mechanical drawing techniques	50
Use knowledge of metric system	39
Use precision measuring tools or equipment	17

Not all positions in these occupations will necessarily perform all of the listed activities. The exclusivity rating is an indication of how unique the activity is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations engage in that activity.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.

## Tools and Technologies that Both Occupations Have in Common

Similarity of Focus  
Occupation to Associated  
Occupation: 63

**Focus Occupation: Mechanical Engineering Technicians (17-3027)**  
**Associated Occupation: Mechanical Drafters (17-3013)**

Tools and Technologies	Exclusivity
Business function specific software	1
Computer data input devices	2
Computer printers	2
Computers	1
Content authoring and editing software	1
Drafting supplies	9
Industry specific software	1

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O\*NET (Occupation Information Network) data.